

CONFIDENTIAL REPORT
PROPOSED UNION PASSENGER
TERMINAL IN NEW YORK

* * *

APRIL 15, 1935

P R E F A C E

PROPOSED UNION PASSENGER TERMINALS

NEW YORK

A proposal for the construction of New Union Passenger Terminals in New York, is herewith submitted for the consideration of the Presidents and Boards of Directors of the several New Jersey Railroads, that are at the present time without such facilities.

Prompting the preparation of this Report is:

The great volume of combined passenger traffic - present and potential - of the Seven New Jersey Railroads that would use the new Terminals, - and which is twice the volume of traffic (1930) of the Pennsylvania Railroad, which owns the only standard Railroad connections between New York and New Jersey.

The great convenience and savings in time by the passengers of the New Jersey Railroads,

A N D

The Self-Liquidation feature of the entire project, within a reasonable period.

NEW JERSEY CONNECTIONS

Preliminary Estimates of Costs of construction of the New Jersey connections between the South Tunnel Portal and the Erie R.R. tracks near Hudson Boulevard in Jersey City for the Joint and common use of all participating Railroads, are also submitted. (Page 51).

Estimates vary according to the type of construction, i.e., extent of Tunnel or open cut work, and the number of Tracks required.

Interest charges may not exceed 1 Cent per passenger.

A feasible location is suggested, offering a direct line, easy grades, low cost of land, the shortest subaqueous construction, and the avoidance of conflict with the extensive Real Estate holdings in Jersey City of the Railroads - (P. R.R. and L.V. R.R.), that will not use the proposed Tunnels.

The engineering and construction work of all connections (outside of the Tunnel Portals) should be referred to the Engineering Departments of the interested Railroads.

PUBLIC INTEREST

In considering the advantages of the Proposed Terminal, Public Interest is paramount. In the saving of Time, general convenience and the development of the communities served, it means much more to the many millions of dependant passengers annually than any increased revenue to the Railroads.

The benefits to the tenant Railroads may consist largely in a substantial increase in passenger traffic. The tenant Railroads may perform this added service at Cost.

The Proposed Terminal is not set up as a competitive project, but is primarily to provide improved facilities for the population of the areas served by the interested Railroads.

Of the total number of New York Passengers carried by the New Jersey Railroads in 1930, two-thirds (67%) - 79,500,000 were dependent on and carried by the Railroads without Terminals in New York City.

The financial structure of this Proposal is predicated upon the fact that the Cost of all Passenger facilities ultimately falls upon the travelling Public. Therefore, it is in the Public Interest to obtain the Lowest Possible Cost Per Passenger in order that these Public Benefits may be enjoyed at no appreciable increase in present fares.

This desirable feature is made possible by the availability of the F.W.A. system of Loans & Grants. It is therefore considered to be of utmost Public Interest that a Maximum Grant and the Lowest Possible Rate of Interest on the Loan be secured.

Under the present favorable low-cost financing made possible by the Administration it is believed possible to create these tremendously improved facilities without material increase in Cost either to the Railroads or to the Travelling Public.

Immediate and future benefits accruing from the Construction of the Proposed New York Union Terminal - other than Transportation Improvement - are not treated completely in this Report. However, separate reports have been prepared indicating the vast employment made possible by the Terminal Project, the unprecedented slum clearance program which it involves, and future construction over a large area which will develop as a result of the completion of this Project.

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PROPOSED UNION PASSENGER TERMINAL IN NEW YORK

The Plan provides for the construction of:

Adequate Railway Tunnel connections under the Hudson River between Manhattan and the several New Jersey Railroads.

New Union Passenger Terminal facilities in Mid-town New York.

New Passenger Station facilities in Lower Manhattan.

A N D

New Passenger Station facilities in Jersey City.

For the Joint and Common use of the following

Railroads:

Baltimore & Ohio
Central of New Jersey
Philadelphia & Reading
New York Central

Erie
Delaware, Lackawanna & Western
New York, Ontario & Western
West Shore

All passenger trains may use the new Terminal and
Passengers would save one-half hour or more daily.

The value and importance of the proposed Terminal as a great convenience to the traveling public, the City of New York, and the Railroads may be readily understood from the fact that the volume of trunk line railway passenger traffic in and out of New York City amounts to more than 40% of the entire total of the United States.

SUBURBAN COMMUNITY INTEREST

"The various suburban communities are fully alive to the need of new terminals which will enable the railroads to distribute their passengers to the main points in the business districts. Only those passengers who come to the Grand Central and Pennsylvania Stations, and whose places of business are within walking distance of those terminals, can reach their destination without transferring to some other system of transportation." (R.S. IV - 1928)

Complete electrification of the Terminal and Approaches is essential.

"The nuisance attendant with steam operation, particularly on the New Jersey lines which pass through the tunnels under Bergen Hill, has in many cases held back suburban residential development in the area served by such railroads." (R.S. IV - 1928)

The residents of nearby New Jersey, hundreds of thousands of whom are under the necessity of commuting to Manhattan, excepting in the areas served by the Pennsylvania Railroad, have daily suffered the loss of an hour or more in traveling from and to their homes, a distance of only a few miles, depending on the same means of transportation in use twenty-five (25) and even fifty (50) years ago.

SUBURBAN COMMUNITY INTEREST (Cont'd)

In the commuting area in many cases from the Mid-town district of Manhattan, for example,--to Orange and Montclair, only about twelve (12) miles distant, the time required by present means of transportation, including time for connections, is nearly one hour.

At least two of the carriers have made commendable efforts to improve their service and shorten their schedules in the interest of their patrons and to meet the swiftly growing competition of the bus and automobile.

The Lackawanna has electrified nearly seventy (70) miles of suburban trackage.

The Baltimore & Ohio has provided connecting motor coach service between Jersey City and the Mid-town section of Manhattan for passengers using its fast express trains. This motor coach service, however, requires about forty-five (45) to fifty (50) minutes and is an unsatisfactory and expensive substitute, both for the railroad and the passengers, for the superior convenience of a well located Manhattan Passenger Terminal.

Preliminary estimates of the costs and plans showing the Terminal lay-out and approaches, together with the advantages are herewith submitted.

PASSENGER TRAFFIC IN THE UNITED STATES

In the year 1920 the number of railway passengers carried in the United States totaled 1,270,000,000

Since 1920 there has been an annual decrease, and in 1929 the total was reduced to 786,400,000

IN NEW YORK CITY

In the same ten-year period passenger traffic on the trunk line railroads in and out of New York City showed an annual increase from a total in 1920 of 223,180,000 to a total in 1929 of 273,460,000 an increase of 50,280,000 or more than 22%.

The year 1930 showed a decrease of 7,600,000 from 1929, or about 2½%.

In 1929 the total number of railroad passengers entering and leaving New York City daily, totaled more than one-third (35%) of the entire number of railway passengers carried in the United States, and in 1932 it amounted to 43% of the total. A large share of this total is carried by the railroads which will use the new Terminal.

In the depression years beginning in 1930, total passenger traffic showed a decline as follows:

<u>YEAR</u>	<u>UNITED STATES</u>	<u>NEW YORK CITY</u>
1930	708,000,000	265,808,000
1931	600,000,000	245,000,000
1932	480,000,000	210,900,000
1933	433,000,000	187,000,000

ANNUAL VOLUME OF PASSENGER TRAFFIC

The volume of traffic for the year 1926, as compared with the volume of traffic for the year 1925, is shown in the following table. The figures are given in thousands of passengers annually, or about more than the combined total of the Long Island and Westchester traffic.

This represents an increase in the New Jersey traffic since 1925 of only annually, as compared to an increase in Westchester traffic of 14,500,000 and in the Long Island traffic in the same five-year period of 20,000,000.

* DAILY VOLUME OF PASSENGER TRAFFIC LEAVING NEW YORK CITY

Sector	1926	1925	Increase 1926 - 1925
New Jersey	316,100	318,100	2,000
Westchester	62,300	98,400	36,100
Long Island	155,000	167,000	12,000
Totals	533,400	583,500	50,100

* As all of these figures represent one-way traffic, the totals for two-way traffic would be double the number above stated.

TREND OF PASSENGER TRAFFIC.

A traffic count taken by the North Jersey Transit Commission, September 1, 1930, at New York City, showed that the total number of passengers entering the city by rail was 1,000,000.

Destination and Distribution:

South of 14th Street 49.7%
14th St. to 59th Street 35.6%

(N.J.T.C. Report 1927. (R.S. N.Y. Vol. IV - 59)

The increasing trend of traffic directed toward Midtown New York may be shown by the destination of passengers of the Long Island Railroad:

<u>YEAR</u>	<u>FLATBUSH STATION</u>	<u>PENNSYLVANIA STATION</u>
1911	10,395,000 (55.5%)	8,396,000 (45.5%)
1924	27,212,000 (44%)	34,806,000 (56%)
1930	31,690,000 (37%)	54,203,000 (63%)

As indicated in the above totals, passenger traffic in the Flatbush Station, for lower Manhattan, increased in thirteen years 16,817,000 or 161%

In the same period traffic in the Pennsylvania Station (Midtown Section) increased 26,410,000 or 314%

LOCAL TRAFFIC - Cont'd

For the six-year period, 1925 to 1930 inclusive,
the increase at Flatbush Station was 4,568,000 or 17%

In the same period the increase at the
Pennsylvania Station was 19,397,000 or 55%

At the same rate of increase, the New Jersey traffic
in 1930 would show a destination south of 14th Street of 42.7%

(Reduced from 49.7%)

And between 14th Street and 59th Street 42.6%

(An increase from 35.6%)

Traffic to destination north of 59th Street and
to Long Island 14.7%

The increased trend Northward may be actually less
since the large areas served by the New Jersey Railroads,
(except the Pennsylvania) have been without rapid transit
and modern transportation facilities, which favor other
sections of the Metropolitan District, with direct access
to the Midtown section of Manhattan.

The selection of home locations in the Metropolitan
District is largely determined and dependent upon: first,
the convenience, time and cost of transportation to and
from place of business or employment: second, upon the ac-
cessibility to amusement and shopping facilities.

development, extending over a wide area, as
Central Park (59th Street), with 42nd Street
development, and the
development, at
Manhattan

It is conclusive that both sections cannot be ade-
quately served by the present terminal facilities, but by
a single terminal in Manhattan.

The Central District is accessible from New Jersey
to the Pennsylvania Railroad only, and, prior to 1910
was in the same situation as the other New Jersey Railroads.
The Pennsylvania Railroad Company's decision to carry pas-
sengers direct to their New York destination, dividing
the traffic, points to one solution of the present problem
of the other New Jersey Railroads, which, by joint and con-
certed action may accomplish that which none can afford
to do individually.

The lines of these New Jersey trunk line railroads
extend to the Great Lakes and to the Mississippi River.
They maintain first-class equipment and service and by ac-
quiring direct access to Manhattan, through the construction
of an adequate and convenient Midtown Terminal, they will
largely restore their parity with the railroads already
having these superior advantages.

101 NEW YORK - (Cont'd.)

action at this time incurs no such risk as taken
the Pennsylvania Railroad a generation ago.
critics of the period.

The (the present) is poorly developed, which is attested by
the amount of traffic in the (the present) which
was:

In 1911	12,037,000
In 1912	14,026,000
In 1920	36,854,000

An increase in nine years

"Commuter traffic from New Jersey to the Pennsylvania
Station in 1920 was largely diverted to the Hudson and Man-
hattan Railroad." (R.C. IV - 1921.)

In 1920 the total reached in the Pennsylvania Station
was 65,885,300, or an increase of 447%.

Growth of the Central District
 ... and places of
 ... 42nd Street and 50th Street areas by March,
 ... seating capacity of ... 25,000

Within a radius of 1000 feet from the center of 42nd
 Street and Broadway, there were forty-four (44) theatres
 with a seating capacity of ... 36,000

Later, in 1923, came Madison Square Garden at
 8th Avenue and 49th Street and 50th Street, with a
 seating capacity of ... 20,000
 The P. S. Schaefer Theatre at 7th Avenue and 47th Street ...
 The RKO Theatre at 3rd Avenue and 42nd Street ...
 and more recently the New Theatre at 42nd Street ...
 at 8th Avenue and 50th Street, and the ...

The Times Square Station includes the Inter-
 city, N.Y.C., and the Queensboro Subways, with a total
 of thirty-two exits and entrances.

The City's large department stores, with many hun-
 dreds of thousands of customers daily, are located prin-
 cipally on Broadway, 34th Street, Fifth Avenue, and 42nd
 Street, and could be conveniently reached by a self-sup-
 porting Shopper's Bus service circulating in the above
 thoroughfares, to and from the New Terminal at scheduled
 intervals. The economy, dependability and convenience
 of such auxiliary service would be well appreciated.

id be taken direct to their re-
their purchases, avoiding the annoyance
ere, and delays necessarily incident to
between the Central District and the New Jersey
whether by ferry from West Third Street or by Hud-
Manhattan Tunnel

In addition to the present terminals, theatres and
shopping centers, are the numerous large hotels,
The largest and most recently constructed office building
located in the Central District area.

The New York Terminal at 11th Street and
was completed in 1904, and at that
time it was the largest terminal in the world
and it has since been the largest terminal in
the world and building one of the most expensive and
elaborate.

The location of the Grand Central Terminal at 42nd
Street and the Pennsylvania Station at 30th Street has
greatly stimulated the growth and development of the Central
District.

REPORT OF THE BOARD OF TRANSPORTATION

PLATTS

GRAND CENTRAL TERMINAL

The Grand Central Terminal at 42nd Street and Park Avenue is used jointly by the New York Central and the New York, New Haven & Hartford Railroad. The upper level is used largely for the express trains, and the lower level for suburban and commuter trains.

There has been a large increase in the number of passengers using this terminal.

<u>The Totals for</u>	<u>1929</u>	<u>and</u>	<u>1930 follow</u>
New York Central	32,000,000		31,810,000
New York, New Haven & Hartford	17,730,500		16,878,000
T o t a l	49,777,000		48,688,000

Showing a decrease in 1930 total from 1929 of
about 2% or 1,109,000

This great Terminal with its large daily volume of passengers has been the magnet that has attracted an unsurpassed development, commercial and architectural, in the Terminal area, a location that only a few years ago was considered undesirable and of little value.

The Pennsylvania Station at 7th Avenue and 33rd.
The station is a very well developed terminal for the volume of
traffic.

The use of this Terminal by New Jersey commuters
has been largely restricted by the Pennsylvania Railroad,
the Hudson & Manhattan Railroad being used to carry this
traffic into New York, the capacity of the Pennsylvania
being limited to two tracks under the Hudson River and
twenty-one (21) passenger tracks in the Terminal.

In 1900 while the Long Island Railroad (owned
by the Penna. R.R.) used the Flatbush Avenue Station for
more than one-third of its passengers, it also carried in
and out of the Pennsylvania Station more than 54,000,000
passengers, indicated as follows:

<u>PENNSYLVANIA STATION</u>	<u>1929</u>	<u>1930</u>
Pennsylvania R.R.	11,339,100	10,535,800
Long Island R.R.	52,825,400	54,203,200
Lehigh Valley R.R.	607,800	520,800
N.Y. N.H. & H. R.R.	<u>627,400</u>	<u>625,200</u>
TOTAL	65,409,700	65,885,000

Total 1930 Traffic shows a gain of 475,000
passengers over 1929 due to Long Island increase

PENNSYLVANIA RAILROAD

FARE TABLE - NEW YORK

Newark to New York (10.1) Miles

To Pennsylvania Station	\$15.32
Via H & M - 33rd Street	8.58
Differential	\$ 6.74 - or 100%

Elizabeth to New York (15.4) Miles

To Pennsylvania Station	\$16.50
Via H & M - 33rd Street	8.58
Differential	\$ 7.92 - or 92%

New Brunswick to New York (32.6) Miles

To Pennsylvania Station	\$21.12
Via H & M - 33rd Street	1.20
Differential	\$ 19.92 - or 60%

NON-COMMUTER TICKETS

Differential between Newark and New York:
an extra fare of 15¢ each way is charged
 passengers using Pennsylvania Station
 instead of H & M to 33rd Street.

"The Pennsylvania Station handles almost twice as many trains from Long Island as it does from West of the Hudson River. This is due to the fact that commuters on the Pennsylvania Lines in New Jersey are discouraged from using the Pennsylvania Station by a much higher commutation fare than can be obtained by using Terminals of the Hudson & Manhattan Company. If it were not for this, the Pennsylvania Station would be entirely insufficient for the combined commuter and through traffic."

(R.S. Vol. IV - P. 74 - 1928)

TABLE 1 WING TRAFFIC IN TONS

<u>YEAR</u>	<u>NEW HAVEN</u>	<u>NEW YORK</u>	<u>TOTAL</u>
1911	10,014,000	10,068,000	20,082,000
1912	10,082,000	10,912,000	20,994,000
1916	10,244,000	13,718,000	23,962,000
1920	16,460,000	20,477,000	36,937,000
1924	17,738,000	22,439,000	40,178,000
1929	17,736,000	32,061,000	49,797,000
1930	16,878,000	31,810,000	48,688,000

PENNSYLVANIA STATION--NEW YORK

<u>YEAR</u>	<u>PENNA. R.R.</u>	<u>LONG ISLAND I.R.</u>	<u>TOTAL</u>
1911	3,641,000	8,296,000	12,037,000
1912	4,012,000	10,114,000	14,127,000
1916	4,212,000	14,179,000	18,390,000
1920	11,717,000	25,137,000	36,854,000
1924	10,171,000	34,806,000	44,977,000
1929	11,339,000	52,835,000	64,174,000
1930	10,535,000	54,203,000	64,738,000

LEHIGH VALLEY

NEW HAVEN

1929	607,000	627,000	65,408,000
1930	520,000	625,000	65,885,000

ACCESS TO THE CENTRAL DISTRICT

From the New Jersey Terminals.

First: - By Ferry to 23rd St. from the Erie and Lackawanna terminals. Average time twenty (20) to twenty-five (25) min.
Second: - Average time twenty-seven (27) minutes. To Liberty Street, twelve (12) minutes.

Allowance must be made for additional time required from trains to Ferry, and from Ferry to surface transportation at 23rd Street. Elevated and subways are not available at 23rd Street Ferry.

Time required to Midtown depends upon mode of transportation and may vary with traffic conditions from fifteen (15) to twenty (20) minutes.

Hudson and Manhattan service is available from the Erie and Lackawanna terminals, and the time to 33rd Street is fourteen (14) minutes.

Erie Schedule, Page 30, allows ten minutes additional for connections at Jersey City. Total twenty-four (24) min.

By Ferry from Weehawken West Shore Station to 42nd Street, average time twelve (12) minutes. Transfer to surface transportation to the Central District.

Ferry from Weehawken to Cortlandt Street, average 30 minutes.

Baltimore and Ohio Railroad motor coaches provide service from stations in the Midtown District to the Jersey City Terminal, requiring from forty-five (45) to fifty-five (55) minutes for connection with the fast B. & O. express trains to the South and West.

NUMBER OF PASSENGERS DAILY

Railroad and Ferry

In 1930, taken on a daily basis, counting 300 full traffic days in the year, 645,544 passengers of all kinds used the railroads and ferries into New York City daily, of whom 512,779 were commuters. The difference between these two figures, 132,554 is the estimated number of the average daily visitors to the City. In 1929 the estimated number of daily passengers was 667,000 of whom 522,257 were commuters and 144,743 daily visitors.

NEW JERSEY RAILROADS - 1930

<u>Railroad</u>	<u>Commuter Zone and</u> <u>Family Trip</u>	<u>Other</u> <u>Traffic</u>	<u>Total</u> <u>Traffic</u>
Baltimore & Ohio		477,200	477,200
Central of New Jersey	13,111,593	3,591,157	16,703,056
D.L. & W.	18,120,647	3,662,080	21,782,727
Erie	28,480,660	2,248,688	30,729,348
N.Y.O. & W.		329,958	329,958
West Shore	<u>8,462,302</u>	<u>365,253</u>	<u>9,427,555</u>
	68,175,508	11,274,336	79,449,844

PENNA R.R.

Penna Station	363,643	10,172,221	10,535,864
Jersey City	2,466,150	968,591	3,434,721
Via Hudson-Manhattan	<u>8,661,855</u>	<u>15,231,433</u>	<u>23,893,288</u>
Total Penna R.R.	11,491,628	26,372,245	37,863,873 *

* Decrease from total of 42,744,319 in 1929.

HUDSON & MANHATTAN

Uptown Station (33rd St.)	31,651,843 - 30%
Hudson Term. - Cortlandt	<u>72,278,550 - 70%</u>

T o t a l 103,930,393

RAIL AND TRANSIT FACILITIES

Each follows and is dependent upon transportation

New York City has been a pioneer in constructing rapid transit lines through virgin and undeveloped territory, and has been able to construct these lines promptly and intensively. (N.M. IV - 100 - 1000)

"It is obvious that there would have been a much greater development of the area if the rapid transit lines had been constructed earlier. The rapid transit lines have been constructed and are now in operation. (N.M. IV - 100 - 1000)

(N.M. IV - 100 - 1000)

"Even without such facilities the New Jersey Railroads carry the largest number of passengers into New York City. (N.M. IV - 100 - 1000)

(N.M. IV - 100 - 1000)

The first elevated railroad in New York, running from the Battery, on Greenwich Street and 4th Avenue to 14th Street, began operation in 1871.

The first subway was opened in 1904. In the area of Manhattan is limited (30 square miles), the surplus growth spread rapidly to the section north of the Harlem River, and to Long Island, everywhere following newly constructed rapid transit lines.

Large areas are available for development in New Jersey, within half the distance of large existing centers in New York, both North and to the East in Long Island.

INCREASE IN POPULATION

OF 1911.

NEW YORK METROPOLITAN DISTRICT.

	1900	1911	%
City of New York	5,073,000	6,371,000	125.4%
NEW JERSEY SECTOR:			
Bergen County, New Jersey	210,700	365,400	173.4%
Essex " "	619,100	674,400	109.1%
Hudson " "	104,900	147,900	141.0%
Middlesex " "	82,900	110,300	133.0%
Monmouth " "	259,100	301,300	116.3%
Morris " "	47,900	65,400	136.5%
Passaic " "	200,100	304,700	152.3%
Somerset " "	45,500	59,500	130.0%
Union " "			
Rockland " "			
TOTAL NEW JERSEY SECTOR	2,334,500	3,081,100	132.0%
WESTCHESTER SECTOR:			
Westchester County, New York	344,500	516,700	150.0%
Fairfield Co. (Conn.) (Part)	100,000	120,000	120.0%
TOTAL WESTCHESTER SECTOR	444,500	636,700	143.2%
LONG ISLAND SECTOR:			
Nassau County, Long Island	126,000	302,400	239.8%
Suffolk " " (Part)	14,000	15,000	107.1%
TOTAL LONG ISLAND SECTOR	140,000	317,400	226.7%
TOTAL METROPOLITAN DISTRICT	8,599,000	11,027,100	128.2%

INCREASE IN POPULATION
OF THE METROPOLITAN DISTRICT

The City of New York alone accounts for	6,250,000
a gain of 14% since 1930, although the Borough of Manhattan <u>decreased</u> about	400,000

At the present rate of growth, the New York Metropolitan District would have in 1940 a population of	13,500,000
--	------------

And in 1950, a population approaching	17,000,000
---------------------------------------	------------

COMPARATIVE GROWTH

During the past ten years, the suburban towns and cities served by the New Jersey roads have failed to keep pace with the growth of similar communities in the Long Island and Westchester sections. This is largely attributable to the inability of these lines to render fast, convenient service to New York City.

N O T E: Population, 1930, State of New Jersey	4,041,000
" Metropolitan Dist. N.J. Sector	3,021,000
-----(75% of total).	

NUMBER OF NEW YORK PASSENGERS CAR-

RIED BY NEW JERSEY RAILROADS - 1930.

Pennsylvania Railroad . . .	37,863,000	(32.3%)
Other New Jersey Railroads	79,449,000	(67.7%)

Two-thirds of total number of passengers were dependent on and carried by the Railroads without Terminals in New York City.

Net to number of New York passengers, in round
 number, carried by the New Jersey Railroads, not having
 Passenger Terminals in New York for the years 1921 and 1929:

Railroad	1921	1929	Approximate Increase
West Shore	7,800,000	9,000,000	25%
Cent. of N.J.	16,000,000	17,000,000	6%
D.L. & W.	20,000,000	22,000,000	10%
Erie	30,000,000	31,500,000	5%
N.Y.O. & W.	600,000	400,000 (LOSS)	32%
B. & C.	550,000	470,000 (LOSS)	16%
TOTAL	74,350,000	80,375,000	8% Ave.

By the New York Railroads in the same periods:

N.H. Lines (Inc. N.Y. W. & B.)	22,500,000	27,800,000	23%
N.Y. Cent.	20,200,000	22,000,000	58%
Long Island	49,600,000	80,270,000	73%
TOTAL	92,300,000	145,130,000	57.2% "

Only the West Shore of the New Jersey group
 showed a substantial increase.

As shown in the above totals: The New Jersey
 Railroads not having New York Passenger Terminals carried
 in 1929 only 6,000,000 more passengers than was carried
 by the same railroads in 1921, or a gain of 8%.

The New York Railroads having Passenger Terminals in
 New York, carried 52,800,000 more passengers in 1929 than
 was carried by the same railroads in 1921, or a gain of
57.2%.

RATES OF INCREASE IN PASSENGER TRAFFIC

NON-COMMUTER

As indicated, the combined passenger totals of Central of New Jersey, Erie, and Delaware, La. Haven and Western Railroads:

In 1911 amounted to	12,400,000
more than double the Pennsylvania Railroad total of	6,000,000

In 1930, the combined totals of the Central of New Jersey, Erie and D.L. & W. amounted to 9,500,000
a loss of 3,300,000 - or 36%.

In the same year, Pennsylvania Railroad traffic had increased to 11,140,000
or a gain of 5,140,000 - or 86%.

Approximately 8% using the New Jersey Terminal, and 92% using the Pennsylvania Station in New York City.

In the second table of: "PASSENGERS, NOT INCLUDING COMMUTERS," is again shown a substantial loss of passengers by the New Jersey Railroads not having New York Passenger Terminals. In sharp contrast is the large increase of Pennsylvania Railroad traffic during the same period.

That the increased volume of Pennsylvania Railroad Passenger traffic is largely due to its superior Terminal facilities in New York, is evidenced by the substantial and consistent growth maintained following completion of the Pennsylvania Station. An aggressive and efficient management in itself, without the present Terminals, could not account for the superior position of the Pennsylvania Railroad.

INCREASE IN PASSENGER - R.T. IN LIVING COSTS

Year	Cent. of E.R.R.	Erie R.R.	D.L. & W. R.R.	N.J. Term. Penna. R.R.	Penna. Sta. N.Y.	Penna. Total
1911	3,400,000	5,000,000	4,000,000	2,000,000	2,000,000	15,400,000
1920	3,600,000	3,750,000	5,000,000	2,100,000	11,000,000	19,450,000
1921	3,400,000	3,900,000	5,000,000	1,000,000	7,000,000	16,300,000
1930	3,500,000	2,250,000	3,000,000	200,000	10,190,000	11,140,000

The year 1920 showed an increase over 1911 for Cent. of N.J. of 20%
 " " 1920 " a decrease from 1911 " Erie R.R. " 2%
 " " 1920 " an increase over 1911 " D.L. & W. " 25%
 " " 1920 " an increase over 1911 " Penna R.R. " 10%

The year 1930 showed an increase over 1911 for Cent. of N.J. of 20%
 " " 1930 " a decrease from 1911 " Erie R.R. " 50%
 " " 1930 " a decrease from 1911 " D.L. & W. " 23.7%
 " " 1930 " an increase over 1911 " Penna R.R. " 65.6%

The year 1930 showed an increase over 1911 at Penna Sta. N.Y. of 190%

estimates for the per
per Passenger, Division of
the Several New Jersey Railroads and for
used on the following:

ion growth for the New Jersey area and entire
Metropolitan District from 1920 to 1930 averaged 2.8% annually.

From 1921 to 1929 inc. the en passenger traffic
in New York City increased from 2,182,000 to
or an average of 2.5% annually.

For the same period New York Railroads entering New
City per mile increased from 1.1 to 1.15 or an average of
0.3% annually.

For the same period the New Jersey Terminal at
New York City Terminals increased their passenger traffic from
76,725,725 to 81,725,725 or an average of .7% annually.

Continuing this rate of increase from 1929 to the
probable completion of the New Terminal in 1938, the traffic
under present facilities should equal 86,471,000 passengers for
the New Jersey Railroads.

However, 80,000,000 passengers for 1938 is stated as
a conservative estimate, and future traffic and amortization
costs are based on this amount. From the opening of the New
Terminal the rate of traffic increase should be at least 1%

annually.

Based on average traffic for 1930, it is estimated that the proposed tunnel will be ample tunnel capacity for the proposed operation. The Long Island Railroad in 1930 carried 1,000,000 passengers (40,000 daily per tunnel).

4.2.2. Index

~~CONFIDENTIAL~~ SPECIAL PROJECT

● 第 3 章 ● 217

Interpret at 4% per year

APR 23 1968 APR 24 1968 APR 25 1968 APR 26 1968 APR 27 1968

Year	Passengers	Rate	Receipts	Per Int.	Balance
1	80,000,000	61¢	\$5,200,000		142,911,474
2	80,000,000	61¢	5,200,000		142,911,474
3	80,000,000	61¢	5,200,000		142,911,474
4	80,000,000	61¢	5,200,000		142,911,474
5	80,000,000	61¢	5,200,000		142,911,474
6	80,000,000	61¢	5,200,000		142,911,474
7	80,000,000	61¢	5,200,000		142,911,474
8	80,000,000	61¢	5,200,000		142,911,474
9	80,000,000	61¢	5,200,000		142,911,474
10	80,000,000	61¢	5,200,000		142,911,474
11	100,000,000	61¢	6,000,000		142,911,474
12	100,000,000	61¢	6,000,000		142,911,474
13	100,000,000	61¢	6,000,000		142,911,474
14	100,000,000	61¢	6,000,000		142,911,474
15	100,000,000	61¢	6,000,000		142,911,474
16	115,840,000	61¢	7,000,000		142,911,474
17	118,800,000	61¢	7,200,000		142,911,474
18	121,760,000	61¢	7,400,000		142,911,474
19	124,800,000	61¢	7,600,000		142,911,474
20	127,920,000	61¢	7,800,000		142,911,474
21	131,120,000	61¢	8,000,000		142,911,474
22	134,400,000	61¢	8,200,000		142,911,474
23	137,760,000	61¢	8,400,000		142,911,474
24	141,200,000	61¢	8,600,000		142,911,474
25	144,720,000	61¢	8,800,000		142,911,474
26	148,320,000	61¢	9,000,000		142,911,474
27	150,000,000	61¢	9,200,000		142,911,474
28	150,000,000	61¢	9,200,000		142,911,474
29	150,000,000	61¢	9,200,000		142,911,474
30	150,000,000	61¢	9,200,000		142,911,474
31	150,000,000	61¢	9,200,000		142,911,474
32	150,000,000	61¢	9,200,000		142,911,474
33	150,000,000	61¢	9,200,000		142,911,474
34	150,000,000	61¢	9,200,000		142,911,474
35	150,000,000	61¢	9,200,000		142,911,474
36	150,000,000	61¢	9,200,000		142,911,474
37	150,000,000	61¢	9,200,000		142,911,474
38	150,000,000	61¢	9,200,000		142,911,474

Less 45 Per Cent Grant

Amount of Loan

Interest at 3 Per Cent Per Annum

115,965.000

\$141,735.000

4,252,050

AMORTIZED IN 44

YEAR	PERCENT	DATE	RECEIPTS	Surplus	Balance due on Cost
1	100.00				\$141,735.000
2	99.00				
3	98.00				
4	97.00				
5	96.00				
6	95.00				
7	94.00				
8	93.00				
9	92.00				
10	91.00				
11	90.00				
12	89.00				
13	88.00				
14	87.00				
15	86.00				
16	85.00				
17	84.00				
18	83.00				
19	82.00				
20	81.00				
21	80.00				
22	79.00				
23	78.00				
24	77.00				
25	76.00				
26	75.00				
27	74.00				
28	73.00				
29	72.00				
30	71.00				
31	70.00				
32	69.00				
33	68.00				
34	67.00				
35	66.00				
36	65.00				
37	64.00				
38	63.00				
39	62.00				
40	61.00				
41	60.00				
42	59.00				
43	58.00				
44	57.00				

36,750,479
91,852,952

000	3,751,610
,000	5,512,165
000	5,677,530

16	150,000,000	58	7,500,000
17	150,000,000		7,500,000

● ● ● ● ●

This great movement, by reason of its character, magnitude and permanency, is comparable with the growth and transformation of the New York City Police District.

* The Inland Terminal Terminal and the Pennsylvania Station have already served the public for nearly 50 years, but are considered new and modern improvements.

The following table shows the increase in passenger traffic for the Lehigh Valley R.R. at the Pennsylvania Stations.

Grand Central Terminal showed an increase from 1911 - 20,000,000
to approximately 30,000,000
in 1930, or 150% increase.

Number of Passengers using Pennsylvania Station	1911 - 15,000,000
" " " " " "	1920 - 36,854,000
" " " " " "	1930 - 65,883,000

An increase in Nine Years of more than 200%.

An increase in Nineteen Years of 447%.

The Mid-City trend in passenger traffic is shown by the number of Long Island Railroad Passengers using the Pennsylvania Station.

An increase from 45% of the total in 1911 to 63% in 1930.

* * *

N O T E: LEHIGH VALLEY R.R. PASSENGERS (1930)

43% Commuter Traffic used Pennsylvania Station, New York

57% " " " Jersey City Terminals.

83% Non-Commuter Traffic used Pennsylvania Station, N.Y.

17% " " " " Jersey City Terminals.

The Number of Passenger Trains in 24 hours in
1924 at the present Manhattan Terminals

As reported by Reg. Surv. IV., Page 76 - 1928

<u>TERMINAL</u>	<u>TRAINS PER DAY</u>	<u>TOTAL PASSENGERS 1924</u>	<u>DAILY AV. (300 DAYS)</u>	<u>AVERAGE PER TRAIN</u>
Grand Central	492	40 178 000	133 000	265
Pennsylvania (Long Island, P. R.R. & Others	404 <u>200</u>			
	604	46 532 000	155 000	260

* The Number of Passenger Trains using the new
Terminals in the average of 1924-1928
per train, may be estimated at 1077 trains per
day for the first five-year period.

	<u>TRAINS PER DAY</u>	<u>ANNUAL TOTAL PASSENGERS</u>	<u>DAILY AVERAGE</u>	<u>AVERAGE PER TRAIN</u>
1st 5 years	* 1077	84 000 000	280 000	260
2nd 5 "	1210	95 100 000	317 000	"
3rd 5 "	1378	107 000 000	358 700	"
4th 5 "	1514	118 928 000	396 400	"

* Number of Passengers per trains may show a
substantial increase.

** Compare with two of the great London Railroad
Terminals, Waterloo and Liverpool Street
Stations, and the St. Lazare Terminal in Paris,
each with 1200 trains daily.

The Project involves not only the construction of a Station Building (which is a minor item - less than 1% of the total cost), but the extension of the lines of the seven New Jersey Railroads direct into the heart of New York City.

The New Terminal is made self-liquidating from the rentals paid by the tenant railroads, which amount, in the aggregate, is sufficient to cover the fixed charges.

Over a 20-year period, based on the traffic estimates, the total interest charges would average about 10.16 cents per passenger.

NEW TERMINAL PROJECT SELF-SUPPORTING

Whether the project may be self-supporting, i.e., from direct income in the form of additional fares, depends upon the number of passengers carried and the extra charges imposed.

That an increase of passenger traffic to a sufficient volume to carry interest charges and to provide for an early amortization as evidenced by already established Terminals in Manhattan is clearly and conclusively shown in the preceding Tables.

The type of Terminal planned is a Through Station served by four main tracks to the North and four main tracks to the South.

As now planned, the Terminal Passenger tracks will number thirty-six (36) with eighteen (18) loading platforms on one level 1800 to 2200 feet in length, an average length of 2000 feet. These varying platforms will easily accommodate two trains of eleven (11), to thirteen (13), cars each on each track.

The vast capacity of the Terminal is evident when it is estimated that about 900 cars would be accommodated if all the available platform space was utilized at one time.

The Terminal Station Building will be modern and spacious, of economical construction (estimated at less than 4% of the total cost of the Terminal Project), limited to Railroad use only, and will be adjacent to both elevated and subway transportation. It will cover the entire width of the thirty-six tracks and will be located near the center of the Terminal tracks.

The Downtown Station is planned to serve the Lower Manhattan area as strictly a Way-station for commuting traffic. Besides the four through tracks, eight station tracks are provided to effect the rapid handling of traffic during peak hours.

PROPOSED PASSENGER TERMINAL FACILITIES
The proposed Passenger Terminal facilities on Manhattan Island will enable the great truck lines to have terminals only in New Jersey, to carry their passengers directly into New York City.

Several locations are available; two are under consideration, where excavation costs would be low and the districts are poorly developed, backward, and land values are low. Either district would be largely redeemed by the completion of the proposed terminal, and proximity to the Central business area will be a great advantage.

TIME REQUIRED FOR CONSTRUCTION

There are no uncertainties, or unusual hazards in this proposal. Every type of construction contemplated has been done before, and costs can be ascertained with reasonable accuracy.

The Pennsylvania Railroad accomplished the same feat single-handed more than twenty years ago, thereby greatly enhancing its prestige, and securing an overwhelming advantage over competing lines terminating on the New Jersey side of the Hudson River.

The Grand Central Terminal was completed in about three years, with train service maintained throughout the construction period, and as building operations can be carried on more rapidly now than ever before, with consequent savings in carrying charges, it will be possible to complete the new Terminal, ready for occupancy, within two.. years.

The movement of freight traffic through the tunnels in sufficient volume, will pay a certain share of the annual charges.

"The estimated cost in 1914 of a proposed tunnel, including equipment and classification yard, was about \$47,000,000."

"An estimated tonnage available to use on all rail, route of 12,500,000 tons."

(From Reg. Surv. Vol. IV - Page 110)
(See Page 126, same Vol. for
Commodity Details).

The amount of tonnage available for all rail crossing of the Hudson River, and the feasibility or desirability of using one or more of the tunnels for freight traffic, at favorable intervals, are matters which are submitted for consideration.

S U M M A R Y

ESTIMATES OF COST

NEW YORK TERMINAL AND TUNNEL PROJECT

(Portal to Portal)

NORTH LANE AND RIVER TUNNEL SECTION	\$ 48 341 000
SOUTH RIVER TUNNEL SECTION	\$23 252 500
SOUTH LANE TUNNEL SECTION (N.J.)	<u>5 933 000</u> . . 40 185 500
NEW YORK LANE TUNNEL SECTION	58 769 000
 WATERFRONT COSTS	 3 500 000
ELECTRIFICATION	16 008 000
 DOWNTOWN STATION	 14 799 500
NEW YORK TERMINAL	39 060 500
 STORAGE AND SERVICE YARDS	 <u>37 027 000</u>
 TOTAL CONSTRUCTION COST	 \$257 690 500

2.75 miles. 4 tracks.

10	ft. 3	\$ 900.00	\$ 9 000 000
	"	1100.00	7 700 000
12 000			
56 000			
56 000			
10.6			

Contingencies 10%

Engineering & Administration 10%

\$ 4 069 11
\$ 44 760 200

Interest during Construction 6%

Total Cost of Tunnel Section

\$48 341 020

NEW YORK TERMINAL:

Track	96 800	1.25	
Third Rail	96 800		2.50
Switches-turnouts-crossings			
Signal			
Platform			
Station			
Overhead			

TERMINAL BUILDING (36 tracks,

Contingencies 10%

Engineering & Administration 10%

Interest during Construction 6%

Total Cost of Terminal Section

\$24 000 000

Engineering 10%
 Engineering & Administration 10%
 Interest during Construction 6%
 Total Cost of Tunnel Section \$-8 769 000

6 400 lin. ft. @ \$1600.00	\$10 240 000
13 970 " " 6.00	83 820
13 970 " " 2.50	34 920
20 " " 900.00	18 000
4 " " 1000.00	4 000

Station Building 1 000 000
 Construction 10%
 Engineering & Administration 10%
 Interest during Construction 6%
 Total Cost of Downtown Station \$14 799 360

Contingencies 10%

Engineering & Administration 10%

Interest during Construction 8% 2 423 140

Total Cost of River Tunnel Section \$33 252 370

LAND TUNNEL SECTION:

Length 3 000 feet = 0.57 miles. 4 tracks.

Tunnels

Third Rail	12 000	" "	2.50	30 000
------------	--------	-----	------	--------

Contingencies 10%

Engineering & Administration 8%

Interest during Construction 6% 392 530

Total Cost of Land Tunnel Section

WATERFRONT COSTS:

New York \$2 500 000

New Jersey 1 000 000

Total \$ 3 500 000

Mr. ... 117 sq. ft.

Contingencies 10%

Engineering & Administration 8%

Interest during Construction 6%

Total Cost

SECTION B: 30 tracks - Capacity 980 cars.

Excavation	2 419 300 cu.yd. @	\$9 677 200
Concrete Retaining wall	79 000 " "	1 580 000
Tunnel approach	1 100 lin.ft. @	1 210 000
Track	90 000 " "	340 000
Third Rail	90 000 " "	225 000
Switches	60 @	54 000
Signals & Interlocking	100 levers @	240 000
Bridges over tracks	49-500 s. ft. @	3 990 400

\$17 516 600

Contingencies 10%

1 751 660

Engineering & Administration 8%

1 541 460

Interest during Construction 6%

1 248 580

Total Cost

\$22 058 300

3 tracks - Capacity

Excavation	444 cu. yd.	\$4.00	\$1 777 600
Concrete retaining walls	50 000 sq. ft.	8.00	1 170 000
Track	12 500 lin. ft.	0.00	
Third rail	12 500 " "	0.00	
Switches	8	900.00	7 200
Signals & Interlocking	16 levers	2000.00	32 000
Bridges over tracks	103 600 sq. ft.	8.00	828 800
	500 lin. ft.	600.00	300 000
Contingencies 10%			417 520
Engineering & Administration 5%			367 420
Interest during Construction 6%			297 610
Total Cost			\$5 257 800

SECTION D: 8 tracks - Capacity 75 cars.

Excavation			
Concrete retaining walls			
Track	8 400 lin. ft.	0.00	50 400
Third rail			
Switches	10	900.00	9 000
Signals & Interlocking			
Bridges over tracks			
Contingencies 10%			1 861 200
Engineering & Administration 5%			186 120
Interest during Construction 6%			150 700
Total Cost			\$2 211 110

SECTION E: 8 tracks - Capacity 30 cars.

Excavation	217 500 cu. yd.	\$4.00	870 000
Concrete retaining walls	15 000 sq. ft.	8.00	120 000
Track	6 400 lin. ft.	0.00	0
Third rail	6 400 " "	0.00	0
Switches	8	900.00	7 200
Signals & Interlocking	16 levers	2000.00	32 000
Bridges over tracks	12 500 sq. ft.	8.00	100 000
Contingencies 10%			144 300
Engineering & Administration 5%			136 300
Interest during Construction 6%			100 000
Total Cost			\$1 400 000

ELECTRIFICATION AND OPERATING EQUIPMENT

Electric Locomotives	75 @	\$15,000	\$1,125,000
Transmission Lines	15 miles	30,000.	450,000
Tracks and 3rd Rail - Amount required in addition to that used in estimate for Terminal and connections			
10,000 lin. ft.	"	8.50	85,000
Sub-Stations	5 "	100,000.	500,000
Locomotive Inspection Sheds 4 -			
8,000 sq. ft. - 32,000 sq. ft.	"	7.50	240,000
Repair Shops for Electric Locomotives			
70,000 sq. ft.		7.50	525,000
Equipment for Shops and Inspection Sheds			150,000
			<u>\$13,200,000</u>
Contingencies - 10%			1,320,000
			<u>14,520,000</u>
Engineering & Administration - 5%			726,000
			<u>15,246,000</u>
Interest during construction - 5%			762,000
			<u>16,008,000</u>
Real Estate - 3 Acres @ \$2000.			6,000
			<u>\$16,014,000</u>
TOTAL COST OF EQUIPMENT			

Note: The use of the Pantograph System for electrical operation may be preferred to the Third Rail. Estimates of Cost are being prepared and will be submitted.

	STICK COST	\$157
	46 PER AN UM	10 308 000
TRADE YARD	37 036 500	
ELECTRIFICATION	16 008 000	

Item	Length	Width	STORAGE	ELECTRI-			
DRY	4743 450	47 361 001		\$ 40	\$ 10 000	30 000	
L.L.&A.	520 641	1 875 750	4.1 H4	100 P.	5 000 000	10 781	
C. J. J.	460 454	1 289 163	210 60	100 00	2 203 100	21 374	
W SHORE	239 182	669 850	164 473	7. 00	1 144 400	11 101	
M. J. C. & A.	12 730	30 636	8 752	3 702	30 900	10 000	
	\$2 154 400	\$6 031 820	\$1 481 460	\$44 120	\$10 308 000	100 000	

erty to be acquired
the MAIN TERMINAL
150 sq. ft.
which was assessed in 1934 as follows

\$24 676 000
5 169 000
\$30 845 000

FOR STORAGE & SH
required is estimated at 2,157,503 sq. ft.,
at 49.5 acres, which w

30 or approx. \$ 8.13 per sq. ft.
9 850 or approx. 5.60 per sq. ft.
50 or approx. \$13.82 per sq. ft.

FOR DOWNTOWN STATION SITE the area required is esti-
mated at 232,993 sq. ft., or about 5.3 acres, which
was assessed in 1934 as follows.

LAND - \$ 4 795 500 or approx. \$19.00 per sq. ft.

\$75 524 220

\$81 976 642

THE NEW YORK TUNNELS - 150,000 sq. ft. at \$4.00 per sq. ft.
150,000 sq. ft. at \$4.00 per sq. ft.
150,000 sq. ft. at \$4.00 per sq. ft.

APPROXIMATE - 150,000 sq. ft. at \$4.00 per sq. ft.
TUNNELS 150 000 sq. ft. @ \$4.00
\$1 730 000

SOUTH TUNNELS: IN FEE

INTEREST - Interest for 40 years at 4%

\$40 000 000

REAL ESTATE CO.

NEW YORK REAL ESTATE

area of the property to be acquired for approaches and tunnels in New Jersey is estimated as follows:

NORTH TUNNEL - Easements-	400 000 sq.ft.	@ .5	\$200 000
SOUTH TUNNEL - Fee & "	250 000 sq.ft.	@ .0	500 000

			\$700 000
AID - Total			20 000

TOTAL ESTIMATED

AERIAL RIGHTS:

Area in Main Terminal	1 631 659 sq.ft.
Area in Downtown Station	252 993
Area in Storage & Service Yards	2 157 503
Total	4 042 155 sq.ft.

TO BE USED FOR -

Main Terminal Bldg.	160 667 sq.ft.
Downtown Station Bldg.	40 000
Plaza	160 667
Parkway, etc	210 891
	<u>572 225</u>

AVAILABLE FOR AERIAL RIGHTS 3 470 000 sq.ft.
or approximately 86% of total area

Note:

There may be added to the above area about 1 500 000 sq. ft. under the enclosed streets.

Note:

A check of the buildings on the Main Terminal and Storage & Service Yards areas show the average street line height is 4.2 stories; and probably more than 75% of them are over 50 years old.

of the air rights over the Terminal
the passenger station, would be assumed by
the Terminal Land Improvement Company, which would
be responsible for the development of the
air rights.

In this development a considerable proportion of
the work must be performed by the Railroad Terminal Company
that would otherwise have to be done by the
erection of buildings for other than terminal use.
The excavation, though not a part of the terminal
construction, will have to be done in order for the air
rights to be concurrently developed.

VALUATION OF AERIAL RIGHTS

In the valuation of aerial rights, consideration
may be given to the following advantages.

FIRST: Excavation and sub-foundation work will be completed
ready for aerial building development.

SECOND: The plottage value according to the large areas under
one ownership and control.

THIRD: The commercial value and advantages resulting from
a daily flow of passengers in large volume into the
new Terminal (estimated at \$4,080,000 annually during
the first five years - \$80,000 per day).*

For the purpose of preliminary financial set-up, the
average value of aerial rights has been tentatively set at
\$.00 per square foot, including excavation and sub-founda-
tion costs.

*Includes both Main Terminal and Lowntown Station.

REAL ESTATE

ED VALUATIONS: The assessed valuations in New York City are fixed at a price which, in the judgment of the Board of Assessors, represents the fair market value for under ordinary conditions. The appraisal is made under oath.

As a result of the existing conditions, the real estate needed for the project is either overpriced and if not bought properly, a considerable addition to the cost will result.

Any publicity given the land, before a title of a substantial portion of the land is acquired, or employment of indiscreet persons in its purchase, will eliminate the possibility of economical buying.

Under present conditions, a large number of the properties required may be obtained at a price approximating the assessed values. The acquisition at an advantageous price of a substantial number of the properties required will be of material aid in establishing the market value in cases where condemnation proceedings are necessary.

ORGANIZATION AND FUNCTION OF THE TERMINAL COMPANY

The Terminal Company to be organized to construct and operate a Union Passenger Station and Terminal facilities in New York City, in the interest of and for the use of the following Railroads:

Baltimore & Ohio	Eric
Central of New Jersey	Delaware, Lackawanna & Western
Philadelphia & Reading	New York, New Haven & Hartford
New York Central	West Shore Railroad

ORGANIZATION AND FUNCTION OF THE TERMINAL

IMPROVEMENT COMPANY

The Terminal Improvement Company to be organized to take over and develop, under contract with the Terminal Company, all the air rights on the land to be acquired by the Terminal Company, except the Station and Plaza sites, in consideration of the assumption by the Improvement Company of certain portions of the cost of land and excavation, together with proportionate carrying charges from and after the time air rights are available for development; the Improvement Company to pay all interest and sinking fund charges on the proportion of the Terminal Company's investment which it assumes, together with a proportionate share of the land taxes.

The Improvement Company to acquire title to the land when its share of the cost is amortized, subject to the usual necessary and proper rights and easements of the Terminal Company in the underground and sub-areas.

...
... Railroad Terminal Company
may provide that the participating Railroads shall pay,
each in proportion to its use, such sum as rental which
...
...
administration costs and taxes.

GUARANTY OF PRINCIPAL AND INTEREST

...
... of the principal and interest ...
... deductions, the participating ...
... to four groups, ...
... in proportion to the ...
traffic.

First Group: - ...

Second Group: - The Delaware, Lackawanna
and Western Lines

Third Group: - The Central ... Jersey Line,
the Baltimore & Ohio, and the
Philadelphia & Reading

Fourth Group: - The N.Y. Central and
the West ...

AN ALTERNATIVE PLAN: May include an agreement for a
fixed charge per passenger,* sufficient to cover interest
and amortization to be paid the Terminal Company by the
tenant railroads - together with operation, maintenance,
administration costs, and taxes.

* See Page 26

RAILWAY TERMINAL BONDS

"These are issued by Railway Terminal Companies and usually have a double security behind them.

They are a lien on the Terminal properties themselves, such as stations, tracks and yards, and besides this are often guaranteed by the several railroads using the Terminal.

The stock of the Terminal Company as a rule is jointly owned by these railroads.

For these reasons, such bonds are either in the class with underlying mortgages or else in a still higher class.

No corporation bond is superior in safety, security or stability."

* * *

Page XXIV. - Moody's Manual of Investments-1930-1931.

R E S U M E

IN RE NEW YORK TERMINAL

1. The proposed Terminal can accommodate all the railroads not now having direct access to Manhattan Island.
2. There are no uncertainties or unusual hazards in this proposal. Every type of construction contemplated has been done before and costs can be ascertained with reasonable accuracy. (P. 32).
3. A pioneer line (The Pennsylvania) accomplished the same feat single-handed more than twenty years ago, thereby greatly enhancing its prestige, and securing an overwhelming advantage over competing lines terminating on the New Jersey side of the Hudson River. (P. 32).
4. That the increased volume of Pennsylvania Railroad traffic is largely due to its superior facilities in New York is evidenced by the substantial and consistent growth maintained following the completion of the Pennsylvania Station. (P. 22).
5. An aggressive and efficient management in itself, without the present terminals, could not account for the superior position of the Pennsylvania Railroad. (P. 22).

Central Terminal was completed in about 1900, but train service maintained throughout the construction period, and as building operations can be carried on more rapidly now than ever before, with consequent savings in carrying charges, it will be possible to complete the Terminal, ready for use and occupancy, within two years. (P. 32).

7. Under the proposed plan, the Terminal Company may relieve the railroads of the major portion of the Real Estate charges by development of the aerial rights. (P. 42-43).

8. This would limit real estate investments by the railroads to transportation purposes only and will provide adequate and well located Terminal facilities at the lowest possible cost. (P. 42-43).

9. This improvement includes the redemption of a substantial area in a blighted section.

10. Approximately 75% to 80% of the total cost will be expended for labor and material. (P. 34).

11. The project as set up is self-liquidating. The character and permanency justifies the lowest possible rate of interest.

12. The new Terminal will be a great public convenience. Passengers using the Terminal would save from one-half to one hour or more daily. (P. 16). More than 40% of

RESUME' (Cont'd)

the total of the Trunk Line Railway passengers in the United States is carried in and out of New York City. A large share of this total is carried by the Railroads which would use the New Terminal.

13. Trunk Line Railway Passenger Traffic from 1920 to 1929 in the United States, decreased 36%. In the same period in New York City, increased 22%. (P. 4).

14. In 1930, two-thirds (67.7%) of the total number of passengers using the New Jersey Railroads in and out of New York City were dependent on and carried by the railroads without Terminals in Manhattan. (P. 20).

15. New Jersey Railroads without New York Passenger terminals carried only 6,000,000 more passengers in 1929 than in 1921, or a gain of 8%. (P. 21).

16. Railroads with passenger terminals in New York in the same period carried 52,800,000 more passengers, or a gain of 57.2%. (P. 21).

In non-commuter traffic, combined totals of Cent. of N.J., Erie and D.L. & W. in 1911, amounted to - 12,800,000 more than double the Penna R.R. total of 6,000,000

In 1930, the combined totals of the Cent. of N.J. and D. L. & W., amounted to 9,500,000
a loss of 3,300,000 - or 26%.

In the same year, Pennsylvania R.R. traffic had increased to 11,140,000
or a gain of 5,140,000 - or 86%.

RETENTION OF PRESENT TERMINAL FACILITIES

Retention of the present Terminal facilities in Jersey City and Hoboken, with the continued use of the present Ferries and Hudson and Manhattan service for traffic to and from the lower district in Manhattan, is not essential.

S U M M A R Y

NEW JERSEY CONNECTIONS AND LOOP TRACKS

Estimates - Construction Costs

<u>SECTION</u>	<u>COST</u>	<u>INTEREST 4%</u>
* 12	\$3 525 000	\$141 000
14	8 566 000	342 600
15	8 320 000	332 800
11	348 000	13 900
9	<u>224 000</u>	<u>9 000</u>
	\$20 983 000	\$839 300 **
16	Existing Tracks (Trackage Rights)	
10	\$ 283 000	\$ 11 300

*** 13

* Includes \$300 000 for Station Building, Jersey City.

** Interest Charge per passenger .84% (20 year period).

Including land cost estimated at \$2 000 000, the total

Interest Charge per passenger .92% (20 year period).

*** No Estimates. See "Foreword" (New Jersey Connections).

APPENDIX

The great City of New York differs largely from other communities in its transportation problems.

Manhattan Island - 12 miles in length, 2 miles in width, - 22 square miles in all, is a comparatively small area in which is concentrated the greatest activities, commercial and financial, in the world's history.

This concentration is cumulative and has already seriously affected the movement of surface traffic, both vehicular and pedestrian.

The comparative freedom of movement of automobile and bus traffic in other cities of less density does not exist in New York.

The only transportation systems able to maintain fast schedules are either elevated or underground.

For that reason Rail Transportation is more vital to New York. At several locations in New York there are already four levels of Rail Traffic. In one location there are five levels.

For purely physical reasons, New York must continue to depend, to an ever increasing extent upon rail transportation.